## DNA SCIENCE AN INTRODUCTORY COURSE IN RECOMBINANT-DNA TECHNOLOGY FOR SCIENCE EDUCATORS AND RESEARCHERS Kentucky University and Brawijaya University

Kentucky University and Brawijaya University
Collaboration

4-7 May 2010 at the University of Brawijaya, Malang, Indonesia

This intensive workshop, which is modeled after that developed at Cold Spring Harbor Laboratory, gives you hands-on experience with the elegant tools of biotechnology. Using techniques identical to those in research laboratories, you will perform experiments that culminate in the production and analysis of recombinant-DNA molecules. You will learn the following techniques:

- Microbiological culturing
- Gel electrophoresis
- DNA restriction analysis

- DNA ligation
- Plasmid transformation of E. coli
- PCR amplification of DNA

Morning lectures introduce major concepts and theories behind the experimental techniques. Afternoon seminars are presented by practicing researchers and scientists to illustrate the application of molecular approaches to solve biological problems.

In addition to bringing you up to date in molecular biology, this course is designed to help you transfer what you learn into your own classroom, your colleagues and your research interests. Post-lab discussions alert you to variables that can influence results and show you how to "troubleshoot" when something goes wrong. One session introduces a small-group approach for analyzing the personal, social and biological implications of recombinant-DNA. Another session focuses on practical aspects of starting a laboratory teaching program in your own school, including:

- Building support for your program
- Scheduling around time constraints
- Finding funds for equipment
- · Assessment techniques
- · Collaborative learning
- Lab safety

## The Lecturer and InstructorTeam:

- 1. Kenctucky University Team: Prof. Joe Chappel, Ph.D, Dr. Yuan Ling, Dr. Michael Reed
- 2. Brawijaya University Team: Fatchiyah, Ph.D. and LSIH UB group

Graduate credit will be available from the University of Kentucky. Participants of workshop will be select by (1) Professional Qualifications and Teaching Assignments, (2) Percentage Disadvantaged/Minority Students, (3) Institutional support and (4) Active English. Acceptance in the workshop is competitive and limited to 20 participants. For an application, contact Mrs. Fatchiyah, PhD. (OC), and Mrs. Helly Nurul Karimah, M.Si. (Sekretariat) Central Lab of Life Sciences Brawijaya University (LSIH UB), Malang, 65145, Phone/faximile: +62 341 559054. Applications must be completed by April 24, 2010 before 15.00 o'clock, send to Secretariat Lab. Sentral Ilmu Hayati Univ Brawijaya, Gedung LSIH UB, jl Veteran, Malang 65145 or Email to labsentralub@ub.ac.id, or lsih ub@yahoo.co.id

Sponsored as a public service by the College of Agriculture, University of Kentucky, and supported by a grant from the Howard Hughes Initiative for Biomedical/Biological Science.